WHAT IS CLAIMED IS:

1   1.   A method for storing data, comprising:

2   associating a cluster with a plurality of storage groups;

3   designating a storage group preference order for data sets associated with the

4 cluster; and

5   when a request to store a data set for the cluster is received, selecting one of the

6 plurality of storage groups using the storage group preference order.

1   2.   The method of claim 1, wherein selecting one of the storage groups further

2 comprises:

3   selecting one of the storage groups using the storage group preference order and

4 storage space availability in each of the plurality of storage groups.

1   3.   The method of claim 1, further comprising:

2   providing a preference setting statement for use in designating the storage group

3 preference order.

1   4.   The method of claim 1, further comprising:

2   presetting a preference setting so that the storage group preference order is used.

1   5.   The method of claim 3, wherein a storage group preference policy includes

2 the preference setting statement.

1   6.   The method of claim 1, further comprising:

2   storing the data set for the cluster in a storage device in the selected one of the

3 storage groups.

1   7.   The method of claim 1, wherein the data set comprises one of a newly

2   created data set and an extended data set for which storage space is being allocated.

1   8.   The method of claim 1, wherein the storage group comprises a sub storage

2   group.

1   9.   A system for storing data, comprising:

2   means for associating a cluster with a plurality of storage groups;

3   means for designating a storage group preference order for data sets associated

4   with the cluster; and

5   means for when a request to store a data set for the cluster is received, selecting

6   one of the plurality of storage groups using the storage group preference order.

1   10.   The system of claim 9, wherein selecting one of the storage groups further

2   comprises:

3   means for selecting one of the storage groups using the storage group preference

4   order and storage space availability in each of the plurality of storage groups.

1   11.   The system of claim 9, further comprising:

2   means for providing a preference setting statement for use in designating the

3   storage group preference order.

1   12.   The system of claim 9, further comprising:

2   means for presetting a preference setting so that the storage group preference

3   order is used.

1   13.   The system of claim 12, wherein a storage group preference policy

2   includes the preference setting statement.

1   14.   The system of claim 9, further comprising:

2   means for storing the data set for the cluster in a storage device in the selected one

3   of the storage groups.

1   15.   The system of claim 9, wherein the data set comprises one of a newly

2   created data set and an extended data set for which storage space is being allocated.

1   16.   The system of claim 9, wherein the storage group comprises a sub storage

2   group.

1   17.   An article of manufacture encoded with instructions for storing data,

2   wherein the instructions cause operations to be performed, the operations comprising:

3   associating a cluster with a plurality of storage groups;

4   designating a storage group preference order for data sets associated with the

5   cluster; and

6   when a request to store a data set for the cluster is received, selecting one of the

7   plurality of storage groups using the storage group preference order.

1   18.   The article of manufacture of claim 17, wherein operations for selecting

2   one of the storage groups further comprise:

3   selecting one of the storage groups using the storage group preference order and

4   storage space availability in each of the plurality of storage groups.

1   19.   The article of manufacture of claim 17, the operations further comprising:

2   providing a preference setting statement for use in designating the storage group

3   preference order.

1   20.   The article of manufacture of claim 17, the operations further comprising:

2   presetting a preference setting so that the storage group preference order is used.

1   21.   The article of manufacture of claim 20, wherein a storage group preference

2   policy includes the preference setting statement.

1   22.   The article of manufacture of claim 17, the operations further comprising:

2   storing the data set for the cluster in a storage device in the selected one of the

3   storage groups.

1   23.   The article of manufacture of claim 17, wherein the data set comprises one

2   of a newly created data set and an extended data set for which storage space is being

3   allocated.

1   24.   The article of manufacture of claim 17, wherein the storage group

2   comprises a sub storage group.